#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024482

Address: 333 Burma Road **Date Inspected:** 31-May-2011

City: Oakland, CA 94607

**Project Name:** SAS Superstructure **OSM Arrival Time:** 700 **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes An Qing Xiang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component: OBG** Components

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

## **WELDING**

This QA Inspector observed the following work in progress:

Outside Yard – OBG Trial Assembly

This QA Inspector observed ZPMC qualified welding personnel identified as 067572, 066675 perform repair welding by Shielded Metal Arc Welding (SMAW), on Sub Assembly part SA3416C to Floor beam weld at panel point 128.3 of OBG Segment 14W. Weld joint is identified as SEG3020AV-011. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-1G-FCM-Repair-1, which is used as per Welding repair report B-WR21133. See attached picture.

This QA Inspector observed ZPMC qualified welding personnel identified as 045175 perform welding by Flux Cored Arc Welding (FCAW), on Floor beam I Rib stiffener to longitudinal diaphragm weld at panel point 125 of OBG Segment 14W. Weld joint is identified as SEG3020W-184. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2231-ESAB. See attached picture.

# WELDING INSPECTION REPORT

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This QA Inspector observed ZPMC qualified welding personnel identified as 068864 perform welding by Shielded Metal Arc Welding (SMAW), on Deck plate I Rib stiffener to Floor beam diaphragm plate weld at panel point 127. 5 of OBG Segment 14W. Weld joint is identified as SEG3020H-061, 062, 063, 064. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2113-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 067501 perform welding by Shielded Metal Arc Welding (SMAW), on Edge plate I Rib stiffener to Floor beam diaphragm plate weld at panel point 127 of OBG Segment 14W. Weld joint is identified as SEG3020L-159/160. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2113-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 067036 perform welding by Shielded Metal Arc Welding (SMAW), on Side plate I Rib stiffener to Vertical Anchor plate weld of OBG Segment 14W. Weld joint is identified as SEG3020U-570. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 058245 perform repair welding by Flux Cored Arc Welding (FCAW), on Deck panel diaphragm to Floor beam weld at panel point 128.3 of OBG Segment 14W. Weld joint is identified as SEG3020D-038. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-FCAW-2G (2F)-FCM-Repair, which is used as per Critical welding repair report B-CWR2997.

This QA Inspector observed ZPMC qualified welding personnel identified as 037748 perform welding by Shielded Metal Arc Welding (SMAW), on Side plate I Rib stiffener to Side plate weld of OBG Segment 14W. Weld joint is identified as SP3141-001-194/195. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2114-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 066459 perform welding by Shielded Metal Arc Welding (SMAW), on Deck plate I Rib stiffener to Floor beam diaphragm plate weld at panel point 128. 3 of OBG Segment 14W. Weld joint is identified as SEG3020D-323. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2213-Tc-U4b-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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# **Summary of Conversations:**

No significant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, phone: 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Upadhye,Anand	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer